

Carbon-related border tax adjustment: mitigating climate change or restricting international trade?

CHRISTINE KAUFMANN* AND ROLF H. WEBER**

University of Zurich

Abstract: Border tax adjustments in the form of carbon taxes on products from countries with lax environmental production standards or in the form of a required participation in an emissions allowances' trading system have become a heavily debated issue under WTO law. Such an adjustment might be permissible if energy taxes as indirect taxes are applied on inputs during the production process. Compliance with the Most Favoured Nation principle has less practical importance than the not-yet settled likeness discussion under the National Treatment principle. Consequently, since the compatibility of carbon-related border tax adjustment measures is partly contested, potential justifications such as the conservation of exhaustible national resources or the protection of health (Art. XX GATT) become relevant. The application of the necessity and proportionality test requires that carbon measures are tailored so as to substantially contribute to the achievement of environmental objectives and do not create any arbitrary or unjustified discrimination.

1. Introduction

A comprehensive analysis of carbon-related border tax adjustments opens a whole plethora of legal, economic, and environmental issues. This article will focus on a *legal* analysis of WTO law, and specifically explore the compatibility of carbon-related border tax measures with the Most Favoured Nation Principle and Non-Discrimination under the GATT. In this context, it will also analyse general exceptions for justifying potential non-compliance with GATT provisions. Given this scope, the Agreement on Subsidies and Countervailing Duties will not be explored. In the same spirit, the paper does not engage in the (fascinating) debate on whether such measures will be sufficient to absorb and neutralize potential

* Email: christine.kaufmann@rwi.uzh.ch

**Email: rolf.weber@rwi.uzh.ch

This contribution is based on a legal opinion delivered by the authors to the Swiss Federal Office for the Environment; the authors would like to thank Dr. iur. Mirina Grosz for her valuable research support.

carbon leakage since this would require an interdisciplinary study conducted jointly with economists and natural scientists.

At present, no globally agreed carbon price scheme exists. Therefore, emission reduction policies (related to greenhouse gas emission) are to be implemented on a national level. Since taxes and/or trading schemes may differ between countries, implementing measures to improve climate conditions could theoretically have anti-competitive effects, as producers of goods who are obliged to comply with high environmental standards may face higher costs.

The resulting risk of energy-intensive industries relocating to countries with less stringent environmental policies is generally referred to as ‘carbon leakage’. Countries that envisage the introduction of relatively strict emission reduction policies express concerns that producers in countries with more lenient environmental regulations will benefit from lower costs.

In addition, such ‘carbon havens’ could, on the one hand, jeopardize the effectiveness of carbon-constraining climate change policies on a global level, and, on the other hand, job relocations could result in a comparative advantage for countries without carbon taxes or equivalent schemes. Concerns about competitiveness and carbon leakage have thus become an important topic in climate change discussions,¹ during the Copenhagen and the Cancun Summits.² Such concerns may even be a reason not to enter into legally binding international agreements.³

2. Notion and effects of carbon tax regimes

The easiest approach for a country determined to comply with high environmental standards and to apply these to imports is the introduction of a (unilateral) tax or tariff on goods from countries that have not ‘comparably offset’ the greenhouse gas emissions associated with the goods’ production. Such a ‘penalty’ can consist of a tariff or tax or in an obligation to purchase carbon credits in the country of sale, i.e. obtain emission allowances. While tariffs apply exclusively to imported goods, taxes and border tax adjustments are based on an existing domestic charge and can apply to both imports and exports. A specific tax or flat tariff would have to be designed so as to compensate for the additional costs in connection with the application of the more stringent emissions standards, thus preserving the competitive equality between the compared products.⁴ Such measures are usually referred to as border tax adjustments (BTA) or border tax measures (BTM).

Apart from the competitiveness aspect, proponents of BTA also argue that such measures may motivate countries to increase their efforts in mitigating greenhouse

1 See also WTO (2009a), 98–100; Aerni *et al.* (2011), 164–168.

2 See WTO (2009b); Veel (2009), 752.

3 For the US, see Pauwelyn (2009), 15.

4 WTO (1997a), para. 24.

gas emissions. However, there are counterarguments based on the claim (i) that the implementation of BTA would be a *prima facie* violation of both the spirit and the letter of multilateral trade principles requiring equal treatment of like products, (ii) that the application of BTA is a disguised form of protectionism, and finally (iii) that BTA in practice undermines the principle of common but differentiated responsibilities.

Price-based measures such as taxes and tariffs are generally deemed as preferable to quantitative controls of imports in the WTO legal regime.⁵ Therefore, in order to balance the lower production costs abroad, the problem of carbon leakage should primarily be tackled by the domestic implementation of carbon taxation as well as by an emission trading scheme.

Border tax adjustment generally encompasses two different sets of measures: (i) the imposition of a tax on imported products, corresponding to a tax borne by similar domestic products (i.e. BTA on imports), and/or (ii) the refund of domestic taxes when the products are exported (i.e. BTA on exports).⁶ Already in 1970, the GATT Working Party on Border Tax Adjustments proposed a very broad notion of border tax adjustments.⁷

Notably, only ‘indirect taxes’, i.e. taxes which are imposed on products (vs. ‘direct taxes’ which are imposed on ‘producers’) are eligible for adjustment at the border.⁸ Furthermore, a distinction is drawn between ‘internal taxes and charges’ pursuant to Article III GATT and ‘other duties or charges ... imposed in connection with importation ...’ according to Article II:1(b) GATT second sentence, which cannot be adjusted at the border.⁹ In addition, ‘border taxes’ and ‘border tax adjustments’ are to be differentiated: while ‘border taxes’ are taxes/customs duties imposed on the imported goods, ‘border tax adjustments’ are adjustments of the taxes imposed domestically when the goods are imported.¹⁰ If the measure in question is indeed a tax, it needs to comply with the National Treatment principle in Article III:2 GATT; if it is not considered a tax but an import duty, Article II GATT applies.¹¹ Whether the tax is levied on a product ‘for general revenue purposes or to encourage the rational use of environmental resources is therefore not relevant for the determination of the eligibility of a tax for border tax adjustment’.¹²

A further distinction has been drawn between the limitation of market access for goods *produced* in a carbon-intense manner, such as biofuels, and the limitation of

⁵ See also WTO (1997a), paras. 2–5.

⁶ For an overview of options for climate policy, see Holzer (2010), 54–57, for possible measures related to the United States, see Hufbauer *et al.* (2009), 67.

⁷ See GATT (1970), para. 4; on this report, see also WTO (2009a), 100; WTO (1997a), paras. 27–30.

⁸ See WTO (1997a), paras. 31–38; Kommerskollegium (2009), 8.

⁹ See WTO (1997a), paras. 52–58 with further references; GATT (1978), paras. 4.17–4.18; GATT (1990a), paras. 5.6–5.7; Charnovitz (2003), 147. See also Dhar and Das (2009), 9–13.

¹⁰ WTO (2009a), 103.

¹¹ Wiers (2008), 21.

¹² GATT (1987), para. 5.2.4.

trade in products whose *end-use* is carbon intensive, such as highly polluting vehicles.¹³ This distinction causes practical challenges, such as (i) the difficulty in assessing product-specific emissions,¹⁴ and (ii) the fluctuations of the carbon price (or allowance price) in the context of an emission trading scheme; as a result legal problems arise regarding the compliance with WTO law.

3. WTO disciplines

3.1 *General legal background*

This section will focus on analysing BTA measures under Articles I to III GATT and – given the limited scope of this paper – leave aside the question of whether such measures may constitute subsidies under the WTO Agreement on Subsidies and Countervailing Measures (ASCM). Similarly, the applicability of Article XI GATT to BTA measures will not be explored.

3.1.1 *Maximum tariff limits*

According to Article II GATT, Member States are bound to a maximum limit of certain tariffs in exchange for similar tariff reductions by their trading partners. This commitment restrains the leeway to add tariffs on imports, without re-negotiating tariff commitments pursuant to Article XXVIII GATT. Article II:1(b) GATT states that products benefiting from a bound tariff concession must be ‘exempt from ordinary customs duties in excess of those set forth and provided [in the tariff schedules] ...’ and ‘shall also be exempt from all other duties or charges of any kind imposed on or in connection with importation in excess of those imposed on the date of this Agreement ...’.

Article II:2(a) allows for ‘imposing at any time on the importation of any product ... a charge equivalent to an internal tax ... in respect of the like domestic product or in respect of an article from which the imported product has been manufactured or produced in whole or in part’. This exception is based on the destination principle which states that products should only be taxed in the country of consumption.¹⁵ Consistent with this principle, it has been assumed that only *indirect* taxes can be subject to border tax adjustment, because they are generally passed on to the consumer, while direct taxes are imposed on the producer.¹⁶ The only WTO case applying Article II:2(a) GATT to charges imposed at the border came to the conclusion that charges on imports in excess of the domestic excise, sales, value-added, and local taxes imposed on like domestic products cannot be justified.¹⁷

13 See Tarasofsky (2008), 8–11.

14 See European Court of Justice (1998), paras. 37–39.

15 GATT (1970), para. 14.

16 Kommerskollegium (2009), 8; see also Wiers (2008), 22.

17 WTO (2008), paras. 172, 175.

With regard to carbon taxes on imports, two questions need to be answered: (1) Is a carbon tax on imports a direct or an indirect tax? (2) Can a carbon tax which is not imposed on the good itself but on the CO₂ emissions generated in its production be qualified as a BTA?

3.1.2 *Direct or indirect taxes*

WTO law distinguishes between ‘direct taxes’ and ‘indirect taxes’, on the one hand, and the application of a tax in a ‘direct or indirect’ way to products, on the other hand. The economic rationale for the distinction between direct and indirect taxes lies in the fact that indirect taxes are reflected in the price of the product, whereas direct taxes are not.¹⁸ The contextual problem, however, concerns the wording of Article III:2 GATT which refers to taxes ‘applied, directly or indirectly, to like imported and domestic products’.¹⁹ If indirect taxes are shifted forward and direct taxes are not, then border tax adjustments preserve competitive equality in international trade, because they neither grant subsidies or incentives to exports, nor disadvantage imports against domestic production.²⁰ The Working Party on Border Tax Adjustments noted a convergence of views that taxes ‘levied directly on products’ were eligible for border tax adjustment.²¹

In the *Canada–Periodicals* case, Canada argued that its excise tax on magazines and periodicals, which distinguished between split-run editions and foreign non-split-run editions based on their advertising content, regulated trade in services (advertising) and did not indirectly affect the product (periodical). The Appellate Body rejected this argument and held that the measure ‘by its very structure and design ... is a tax on a periodical’ and thus affected a product and not a service. An important element in the Appellate Body’s analysis was the fact that it considered the tax as complementary to the applicable Tariff Code, which prohibited the import of certain periodicals.²² Extending the spirit of this approach, an environmental tax on energy would be ‘by its very structure and design’ a tax on the energy product, not on the ‘final’ like product being examined under Article III:2 GATT.²³

So far, carbon taxes have not been examined in WTO dispute settlement mechanisms. However, there is consensus that carbon taxes aim at levelling the playing field between like products in the country of destination. In other words, they aim at internalizing the social cost of carbon, and thus increase the prices of products.²⁴ Consequently, most authors conclude that therefore carbon taxes can

18 Demaret and Stewardson (1994), 14.

19 Goh (2004), 410.

20 Demaret and Stewardson (1994), 14.

21 Goh (2004), 410.

22 WTO (1997b), p. 18.

23 Goh (2004), 410/11.

24 WTO (1997), para. 36.

be qualified as indirect product taxes, as long as there is a ‘nexus’ between tax and product.²⁵

3.1.3 *Adjustability of carbon taxes as not physically incorporated taxes?*

Article II:2(a) GATT allows (i) imposing a charge equivalent to an *internal tax* in terms of a border tax adjustment and consistent with Article III:2 GATT on the importation of any product, and (ii) imposing charges on ‘articles from which the imported product has been manufactured or produced in whole or in part’. While the first type may refer to charges on domestic and ‘like’ imported fuels, the second type could refer to the energy inputs and fossil fuels used in the production process.²⁶

At the centre of this discussion therefore is the distinction between products and process and production methods (PPMs), since an indirect carbon tax relates to the emissions produced in the making of a product, i.e. the process or production method used. In other words, the question must be addressed whether Article III:2 GATT permits border tax adjustments on a final product for inputs, such as energy, used in the production process.²⁷

A potentially important distinction is whether the process of production has been incorporated in the final product or not.²⁸ Where the inputs are not physically incorporated in the final product, it becomes much more difficult to verify their actually used amounts.²⁹ While BTA are generally allowed for indirect taxes on inputs that are physically incorporated in the final product,³⁰ legal doctrine partly criticizes WTO practise as to whether indirect taxes on inputs, which are not physical, such as carbon, energy, fuel, etc., can be adjusted at the border.³¹ For instance, the Panel in *US–Superfund* in principle permitted the border adjustment to any ingredient physically present in the imported product.³² In this case, a tax was imposed on certain chemicals and on imported substances produced or manufactured using those chemicals. Uncertainty, however, remains with regard to how the case law would apply to materials or energy used in manufacturing a product.³³ Notably, the 1970 Working Party only acknowledged that there was a ‘divergence of views’ on the matter.³⁴

25 Pauwelyn (2004), 20–21; see also Dröge *et al.* (2004), 306.

26 See also Demaret and Stewardson (1994), 18–20.

27 Goh (2004), 402 *et seq.*

28 WTO (2009a), 104; WTO (1997a), paras. 66–70; GATT (1987), paras. 5.2.7–5.2.8; Bierman and Brohm (2005), 293–295; Bhagwati and Mavroidis (2007), 303 *et seq.*; see also the overview in Kommerskollegium (2009), 8–9.

29 Genasci (2008), 35–36 with further references.

30 GATT Legal Drafting Committee quoted in GATT (1987), para. 3.2.6.

31 For further details, see WTO (2002a), paras. 98–102; for the legal doctrine Charnovitz (2003), 148; Pauwelyn (2007), 19–20.

32 GATT (1987), paras. 2.5 and 5.2.4. See also European Court of Justice (1998), paras. 37–39.

33 Pauwelyn (2007), 20.

34 GATT (1970), para. 15.

Whether taxes on energy consumed in making a product (so-called ‘embedded energy’) are border adjustable³⁵ is questionable. First, BTA require an existing domestic tax. Second, BTA can only be applied on products. As a result, charges on imports which are not related to a domestic tax are not BTA under WTO law, and taxes which are not applied to products are not border-adjustable. The fact that a product of a given physical description depending on the manufacturing process causes different amounts of CO₂ emission further complicates the issue. However, the language of Article II:2(a) GATT seems to allow a tax adjustment to be based on an ‘article from which the imported product has been manufactured or produced in whole or in part’. Consequently, according to recent scholarly work, ‘the parallel application of a product-specific carbon tax to domestic and imported products does not inevitably lead to a conflict with GATT rules’.³⁶

3.2 *Most Favoured Nation principle*

The principle of Most Favoured Nation (MFN) treatment as stated in Article I GATT provides for equal treatment between imported products from any WTO member country. Article I GATT applies to customs duties and charges, import and export formalities, and measures covered by Article III:2 and Article III:4 GATT.³⁷ Article I:1 GATT has been subject to many WTO dispute settlement proceedings. For example, in the *European Communities–Tariff Preferences* case the Panel held that ‘unconditionally’ meant a treatment ‘not limited by or subject to any conditions’.³⁸ The Appellate Body explained further in *Canada–Autos* that not only *de jure* discriminations but also *de facto* discriminations involving ostensibly origin-neutral measures are covered by Article I:1 GATT.³⁹ The Appellate Body also approvingly acknowledged the broad interpretation of ‘advantage’ in the *European Communities–Bananas* case, stating that the differing rules on imports did constitute an advantage, even though competition policy considerations may have been the basis for the EC rules.⁴⁰

Both unilateral tax measures as well as the establishment of a regime requiring importers to obtain allowances bear the risk of being challenged in the WTO, based not only on the MFN commitment, but also on the arguments that such additional costs on imports discriminate in favour of domestic products.⁴¹ The MFN requirement could for instance be violated if a carbon regulation imposes requirements on the importation of products from a specific WTO Member with carbon-intensive production methods. Notably, it would be a breach of Article I GATT to exclude developing countries from a particular national import scheme

35 Hufbauer *et al.* (2009), 68.

36 Hufbauer *et al.* (2009), 69.

37 Hufbauer *et al.* (2009), 46; Wiers (2008), 21–22.

38 WTO (2004), para. 7.59.

39 WTO (2000a), para. 78.

40 WTO (1997c), paras. 206–207.

41 For the National Treatment clause, see Section 3.3 below.

depending on their stage of economic development. However, a way-out could be found in the United Nations Framework Convention on Climate Change (UNFCCC). Article 3.1 UNFCCC emphasizes the principle of common but differentiated responsibilities and capabilities. According to this principle, developed countries 'should take the lead in combating climate change and the adverse effects thereof'. With regard to trade, Article 3.5 UNFCCC is equally important because it states that 'measures taken to combat climate change, including unilateral ones, should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade'. While it is undisputed that developed countries (Annex 1 of the Kyoto Protocol) have more responsibilities than developing countries, it is more difficult to address the equity concerns which are implicit in the 'differentiated responsibilities' approach in way that is compatible with WTO law.⁴² For the purpose of this article, which cannot engage in a detailed analysis of the relationship between the UNFCCC and Article I GATT, it can be safely said that Article 3.5 UNFCCC draws on the language in the chapeau of Article XX GATT and together with Article 3.4 UNFCCC points in the same direction with its attempt to balance different interests.⁴³ As a result, despite their different objectives, the UNFCCC and WTO law may be seen as complementary concepts for addressing the distributional consequences of climate change policies, while at the same time acknowledging the different capacities of the parties.⁴⁴ Neither the UNFCCC nor the WTO supports the use of trade measures for shielding domestic industry from competition. In accordance with recent economic studies,⁴⁵ it is therefore possible to tailor carbon-related BTA so as to be compatible with both the UNFCCC and Article I GATT.⁴⁶

Finally, the MFN clause could be violated if a carbon regulation imposes requirements on the importation of industrial products from a WTO Member that does not engage in the Post-Kyoto regime.⁴⁷

3.3 *National Treatment clause*

3.3.1 *Meaning of Article III GATT*

Under Article III GATT, the National Treatment (NT) obligation, two key questions arise: (i) Are the domestic and the competing imported products 'like' and, if so, (ii) are the imported products treated less favourably than the domestic products? However, first the scope of application of Article III GATT and the distinction between Article III:2 GATT and Article III:4 GATT are to be addressed.⁴⁸

⁴² Gros and Egenhofer (2009), 94–96.

⁴³ For a more detailed analysis Gros and Egenhofer (2009) and Aerni *et al.* (2011), 148–151.

⁴⁴ Stephenson and Upton (2009), para. 100.

⁴⁵ Gros and Egenhofer (2009).

⁴⁶ Cosbey (2008), 4.

⁴⁷ Kommerskollegium (2009), 13.

⁴⁸ See also Kommerskollegium (2009), 9–11; Quick and Lau (2003).

With regard to the scope of application of the GATT, the question needs to be answered whether the tax applied to imports is part of an internal taxation scheme. If this is the case, the carbon tax on imports will be covered by the NT requirement, even if the tax is directly levied upon importation.⁴⁹ If the carbon tax is applied only to imports, while other measures are applied domestically, it may be questioned whether Article III GATT applies to the import tax at all; the Note ad Article III GATT states that ‘any internal tax ... which applies to the imported product and to the like domestic product and is collected in the case of the imported product at the time or point of importation, is nevertheless to be regarded as an internal tax’. The 1970 GATT Working Party on BTA also concluded ‘that taxes directly levied on products were eligible for tax adjustment’.⁵⁰

Under Article III:2 GATT, the National Treatment principle prohibits the discrimination between domestic and foreign producers with regard to internal taxes or other internal charges. Consequently, a carbon tax on imports is required to be accompanied by a domestic tax. Indeed, it has been argued that the obligation for domestic industry to participate in an emission trading scheme could be equivalent to paying a domestic tax.⁵¹ Partly, the legal doctrine distinguishes between (i) products which *cannot* be differentiated on the basis of carbon-content and (ii) products which *can* be differentiated.⁵² Since climate measures were not on the agenda for the GATT Working Party on BTA in 1970, and since the different climate change-related measures differ significantly, only a minority of scholars advocates the application of BTA on carbon taxes.⁵³

Under Article III:4 GATT, the focus is set on ‘laws, regulations, and requirements affecting [imported products] internal sale, offering for sale, purchase, transportation, distribution or use’. Foreign goods are not allowed to be treated less favourably than like domestic goods. Insofar as the Appellate Body explained in the *European Communities–Asbestos* case that ‘like’ in Article III:4 GATT has a ‘relatively broad product scope’ and is broader than the ‘like’ in Article III:2 GATT.⁵⁴ Nevertheless, the shift of focus from tariffs towards regulations becomes important in view for example of importers’ obligations to hold emission allowances.⁵⁵ As a result, a climate tax is more likely to violate Article III:2 GATT than an obligation for importers to obtain allowances is likely to violate Article III:4 GATT.⁵⁶

49 The tax then is a BTA to be assessed under Article III:2 GATT; Wiers (2008), 21.

50 GATT (1970), para. 14.

51 See Kommerskollegium (2009), 9–10; De Cendra (2006), 135–136 holds that only trading schemes in which emission rights are auctioned are comparable to a domestic tax.

52 Dhar and Das (2009), 7–33.

53 Kommerskollegium (2009); see also Veel (2009), 771–775; Wiers (2002), 158–159.

54 WTO (2001b), 98–100, 103; see also Hufbauer *et al.* (2009), 36; Wiers (2002), 160 *et seq.*

55 See Kommerskollegium (2009), 10–11 with regard to whether Article III GATT covers border carbon tax adjustments.

56 Regarding the approach of the ‘best available technology in the home market’ under Article III:2 GATT, see Dhar and Das (2009), 30–31.

3.3.2 *The ‘Likeness’ criterion*

For reasons of practical relevance, the subsequent discussion will only relate to Article III GATT. The likeness test must be done on the basis of the particular context and circumstances of a given case,⁵⁷ or as the Appellate Body put it in its renowned phrase: ‘The accordion of “likeness” stretches and squeezes in different places as different provisions of the WTO Agreement are applied.’⁵⁸

Most of the case law and the controversies on the concept of likeness have been developed in the (hereinafter relevant) context of the National Treatment provision.⁵⁹ Thereby, the fundamental prerequisites necessary for determining likeness have been framed by the GATT Working Party on Border Tax Adjustments as encompassing: (i) physical characteristics, such as the products’ properties, nature, and quality; (ii) consumers’ tastes and habits; (iii) the products’ end-uses in a given market; and (iv) the products’ tariff classification.⁶⁰ ‘Likeness’ requires that the products are in a competitive relation to each other. According to methods of market demarcation, this is the case where the products in question are related to each other as substitutes.⁶¹

The issue underlying the likeness problem has been framed as ‘the existence of differences between the products that justify different regulation’. Accordingly, ‘regulatory distinctions must have a rational relation to some non-protectionist regulatory purpose; and therefore products must be treated the same ... if and only if they do not differ in any respect relevant to an actual non-protectionist regulatory policy’.⁶² Therefore, the bottom line implies preventing the potential abuse of process and production methods (PPMs) for establishing trade barriers, while at the same time ensuring that the necessary distinctions are possible.⁶³

Article II:2 (a) GATT allows two types of import charges (i.e. BTA): (i) charges imposed on imported products that are like domestic products, and (ii) charges imposed on articles from which the imported product has been manufactured or produced in whole or in part. The term ‘like products’ is usually interpreted in a wide sense; for example in the *Korea–Beef* case, the Appellate Body stated that imported products are treated less favourably than like products if a measure

⁵⁷ See Davey and Pauwelyn (2000), 25–36.

⁵⁸ WTO (1996b), para. 21.

⁵⁹ Cottier and Oesch (2005), 361; for an overview, see for example Trebilcock and Howse (2005), 65 et seq.; Vranes (2009), 191 et seq.

⁶⁰ GATT (1970), para 18.

⁶¹ See Kommerskollegium (2009), 11–12; Hufbauer *et al.* (2009), 36–37; see also for example Vranes (2009), 194–197 stating that competition will regularly depend on consumer perception, thus placing consumers at the centre of attention and arguing that therefore international agreements should not be regarded as particularly relevant for the determination of likeness as reflections of governmental interests.

⁶² Howse and Regan (2000), 260.

⁶³ See also Vranes (2009), 324; Trebilcock and Howse (2005), 65/66; Cottier and Oesch (2005), 412–418 with an overview over the lines of argumentation and further references.

modifies the conditions of competition in the relevant market to the detriment of imported products.⁶⁴ As already outlined, however, only indirect taxes, imposed on products, are eligible for BTA.⁶⁵

In the context of this article, it is important to assess whether products may be considered ‘unlike’ because of differences in the way in which they have been produced (referred to as non-product-related PPMs) with a view to mitigating climate change. In *EC – Measures Affecting Asbestos and Asbestos-Containing Products*, the Appellate Body assessed the likeness between asbestos and other competing industry fibres such as PCG fibres (Polyvinylacetate, cellulose, and glass) and thereby examined the argument of the European Communities according to which the inquiry into the physical properties of products should also include a consideration of the risks posed by the product in question to human health. By reiterating that in examining the ‘likeness’ of products all relevant evidence must be evaluated by the Panels, the Appellate Body explicitly addressed the health concerns – the carcinogenic effects – associated with asbestos containing products, not as a separate criterion for the assessment of likeness, but instead as an indicator of the physical properties and consumers’ tastes and habits.⁶⁶ It held that carcinogenicity or toxicity constitute defining aspects of the physical properties of asbestos fibres.⁶⁷ Ultimately, the Appellate Body adopted the ‘like product’ analysis according to the four criteria of physical properties, end-uses, consumers’ tastes and habits, as well as the tariff classifications.⁶⁸ Regarding the physical properties in particular, the Appellate Body stated that chrysotile asbestos and PCG fibres are very different, mainly with regard to the levels of risk they imply, while evidence was missing to determine whether the different types of cement-based products could perform all of the same functions with equal efficiency. The Appellate Body furthermore held that Canada had not provided for sufficient evidence to assess the consumers’ tastes and habits. It finally concluded that Canada had not managed to demonstrate the likeness of the products in question. As a consequence, the Appellate Body found that there had been no breach of Article III:4 GATT.⁶⁹

The Appellate Body’s finding that fundamental human health risks are relevant when assessing the likeness of products was perceived as a broadminded outcome. It was particularly appreciated as a signal that the GATT would accommodate national governmental environmental regulations concerning the *characteristics* of imported products. In these terms, it was concluded that if the ‘product’ at issue is polluting, then its sale and thus its importation may be restricted on a

64 WTO (2000b), paras. 130, 137, 144.

65 See Section 3.1 above; WTO (1997a), paras. 31–38; WTO (2009a), 103.

66 WTO (2001b), para. 113.

67 Ibid., paras. 114, 136.

68 Ibid., para. 133 with reference to GATT (1970), para. 18.

69 WTO (2001b), 133–148.

nondiscriminatory basis.⁷⁰ In these terms, it is noteworthy that in the *Automobile Taxes* case, a GATT Panel had ruled that high-fuel efficient cars are not ‘like’ gas-guzzling cars.⁷¹

Nevertheless, the Appellate Body report should not be interpreted too widely. It particularly does not reveal whether other policy objectives such as the protection of the environment or human health considerations in more general terms could also be considered when examining the likeness of products.⁷² Furthermore, it must not be underestimated that for the specific case of asbestos, the health risks had been internationally acknowledged and confirmed by experts for some time before the Appellate Body’s ruling. The rather extensive scientific evidence certainly facilitated the Appellate Body’s finding. Whether the Appellate Body would repeat such an open approach regarding more controversial substances remains to be seen.⁷³

In sum, four criteria have been confirmed by the Appellate Body and are applicable for assessing likeness: the physical characteristics of the products, their end-uses, competitive relationship, and consumer preferences. Although especially the criterion of consumer preferences has significantly opened the door for considering non-trade concerns, given the lack of specific decisions, it is not yet completely clear to what extent environmental policies may influence the likeness of products.

3.3.3 *Distinction of products based on their process and production methods?*

Instead of focusing on the physical characteristics for assessing the likeness of goods produced in a climate-friendly manner and goods produced in a carbon-intensive manner, it can be argued whether the like product test should include the way in which they have been processed or produced (PPMs). A determination of ‘non-likeness’ according to the PPMs distinction could be derived from the criterion of ‘consumer tastes and habits’.⁷⁴ Article III:2 GATT reads as follows: ‘Products ... shall not be subject, directly or indirectly ...’, which has been interpreted as enabling the adjustment of taxation of inputs in the final product.⁷⁵ However, PPMs as a criterion for differentiating between products are highly controversial. Arguably, the existing case law would suggest that discriminatory measures based on the PPMs are not permitted without reservation under the GATT.

70 For a discussion of the case, see Breining-Kaufmann (2001) and for a different interpretation stating that the Appellate Body considered health as irrelevant for the likeness test, see Trebilcock and Howse (2005), 101–108.

71 GATT (1994b), paras. 5.19–5.38.

72 Oesch (2003), 459–460.

73 See Button (2004), 20–21, 40–41; see also Hufbauer *et al.* (2009), 36–37.

74 Quick and Lau (2003), 431–433 with a critical assessment of consumer tastes and habits as a decisive criterion.

75 Wiers (2008), 22.

In the (unadopted) *Tuna I* case, the Panel rejected the differentiation between tuna harvested with and tuna harvested without certain fishing techniques applied to reduce the incidental taking of dolphins for the purpose of determining the ‘likeness’ according to Article III GATT. It thereby claimed that the process measures were not covered by Article III GATT.⁷⁶ However, the GATT Panel decided this when elaborating on the categorization of the import prohibition as an internal regulation pursuant to Article III GATT or as a quantitative restriction under Article XI GATT. The concept of likeness was thus mentioned but not further elaborated on in the context of deciding which provision was applicable. This approach was criticized and rejected subsequently.⁷⁷ According to more recent jurisprudence, the question of likeness is not decisive for the assessment of the provisions’ scope of application, but has to be examined in a second step, when the applicability of Articles I or III GATT is already established.

Despite such criticism, the GATT Panel report contributed to the discussion on PPMs by distinguishing between measures that ‘affect products as such’ and measures that do not. Besides referring to the notion of ‘product’, the text of the GATT provisions did not provide for such a distinction.⁷⁸ Nevertheless, the Panel’s approach has led to the understanding that PPMs are only to be considered in the assessment of products’ likeness if they manifest themselves in the ‘products as such’. Product-related PPM-based measures are thus applied to guarantee the quality, safety, and functionality of the product and are usually directly detectable in the end product. Non-product-related PPM-based measures, however, are more controversial. An example could be a standard to regulate the amount of energy consumed in the manufacturing process or to ensure environmentally friendly production or a safety measure that is made mandatory for the production process.

The root of the debate lies in the concern that, by limiting the imports of products produced in a specific manner, exporters from other countries may face difficulties to access such a market, as they have to adapt their domestic PPMs to comply with the specific requirements called for in the importing state. Specific standards may result in financial burdens and technical difficulties and can thus particularly affect smaller producers as well as producers in developing countries with presumably lower standards in place. Furthermore, the effects of PPM requirements on the exporting state’s regulatory autonomy should not be underestimated.⁷⁹

76 GATT (1991), paras. 5.10–5.15, 5.35. Notably, *US–Shrimp* raised similar questions, but since the Article XI violation found by the Panel was not challenged by the US, the Appellate Body did not consider PPMs under Article III of the GATT: WTO (1998), para. 98.

77 See inter alia Howse and Regan (2000), 254; Regan (2009), 104; Hudec (2000), 198–217 with an overview of the subsequent GATT and WTO cases.

78 See however Marceau and Trachtman (2002), 857 supporting the view that Article III did not apply.

79 See also the brief outline provided by Bernasconi-Osterwalder *et al.* (2006), 204.

No prediction can be made as to whether and how the debate on PPMs will be solved. While some scholars argue that physically identical products can be perceived as ‘un-like’ due to different production methods,⁸⁰ for example, based on a reasonable consumer test,⁸¹ others are more hesitant, and stress that such differentiation could arguably be only deemed as settled for processes that are incorporated in the final product.⁸²

Indeed, when examining the competitive relationship between comparable products as a criterion for likeness, a particular focus could be set on consumer preferences. If consumers distinguish between products based on the applied PPMs, irrespective of whether these are product or non-product related, strong arguments would exist to consider PPMs in the assessment of like products, depending on the case in question. In view of such findings, eco-labels have been introduced to provide information about the environmental characteristics of the labeled products and services. Notably, the definition of ecolabels adopted by the Global Ecolabelling Network thereby includes both product- as well as non-product-related PPMs.⁸³

3.3.4 *Treatment no less favourable*

Article III:4 GATT requires WTO Members to treat foreign goods no less favourable than like domestic goods. This provision becomes particularly relevant if the border taxes are part of a domestic regulatory scheme.⁸⁴ In the *EC–Asbestos* case, the Appellate Body examined the overall treatment of a group of imported products compared to a group of like domestic products.⁸⁵ In the legal doctrine, this analysis was deemed ‘a more sophisticated approach’,⁸⁶ as traditionally the analysis has focused on the question of likeness of products, with the less favourable treatment being assumed in the case of likeness and a difference of treatment.

In respect of carbon taxes and charges on imports, the like products would have to be exposed to a regime in which the overall group of imported like products is affected more heavily than the overall group of like domestic products.⁸⁷ Usually, a detrimental effect on a given imported product related to the foreign origin of the product is required.⁸⁸ Based on this criterion, Pauwelyn identifies regulation which relates to the environmental concerns of climate change and not to the foreign

80 See for example Howse and Eliason (2009), 67–69.

81 Bhagwati and Mavroidis (2007), 304.

82 Marceau and Trachtman (2002), 859–860; Kommerskollegium (2009), 12, perceiving the view that physically like products can hardly be considered ‘unlike’ merely because of their production method as the prevailing argument.

83 Global Ecolabelling Network (GEN) (2003), para. 4.2; see also Bonsi *et al.* (2008), 415–417, 423–424; Trebilcock and Howse (2005), 111; Vranes (2009), 324.

84 See Wiers (2008), 23–24.

85 WTO (2001b), para. 100.

86 Wiers (2008), 24.

87 Pauwelyn (2007), 30.

88 WTO (2001b), para. 100.

origin of the product.⁸⁹ Other authors are also of the opinion that it is possible to show that there is no less favorable treatment of the group of imported products relative to the group of like domestic products; in fact, the actual design and operation of the scheme would be important. Substantively, it must be determined what kind of foreign program for emissions control would qualify as being equivalent to the domestic program and what kind of per-unit allowance would be required of an imported product where it originates from a jurisdiction that does not have an equivalent emissions control program.⁹⁰

In sum, among legal scholars the opinion prevails that less favourable treatment of imported products compared to like domestic products could be avoided, depending on the design of measure.⁹¹

4. Justification (Article XX GATT)

4.1 *General principles*

Article XX GATT justifies a violation of the GATT based on legitimate non-trade policy goals, provided that such interests are adequately balanced against the objective of free trade. The elements of this balancing test have been defined in the Appellate Body's jurisprudence. The Appellate Body applies a two-tiered analysis:⁹² first, in order for Article XX GATT to be applicable, the measures taken by a Member State in violation of the GATT must fit under one of the specific exceptions in Article XX (a)–(j) GATT. If measures fall under one of these provisions, they still have to be necessary and proportional. Second, the scheme in question must also be applied so as not to create arbitrary or unjustified discrimination; it thus has to comply with the Chapeau of Article XX GATT.⁹³

Since the list in Article XX GATT is exhaustive, BTA measures can only be justified based on one of the rationales mentioned in Article XX GATT.⁹⁴ Carbon-related BTA measures are clearly driven by the implementation of environmental goals and mitigating climate change, they are not motivated by avoiding competitive disadvantages for domestic industry. Accordingly, the legal doctrine intensively discusses the merits of Article XX GATT and in particular Article XX(g) GATT.⁹⁵

The Appellate Body reaffirmed the competence of WTO Member States to determine their own environmental objectives in several cases. For example, the

89 Pauwelyn (2007), 30.

90 Howse and Eliason (2009), 70.

91 Kommerskollegium (2009), 12.

92 See for example WTO (1998), paras. 115–121; WTO (1996a), para. 22; see also WTO (2000b), paras. 156–157.

93 WTO (1996a), pp. 16–17; for a compilation of the WTO practice to Article XX, see WTO (2002b). For a comprehensive analysis which this section partially builds on, see Grosz (2011), 430 et seq.

94 Charnovitz (2003), 148.

95 See Hufbauer *et al.* (2009), 49–51.

Appellate Body noted in the *US–Shrimp* case,⁹⁶ that measures conditioning market access on whether exporting Members comply with a policy unilaterally prescribed by the importing Member fall within the scope of Article XX GATT. In particular, policies aimed at reducing the consumption of cigarettes, protecting dolphins, reducing risks to human health posed by asbestos, reducing risks to human, animal and plant life and health arising from the accumulation of waste tyres, as well as policies aimed at the conservation of tuna, salmon and herring, dolphins, turtles, petroleum, and clean air qualify as justification for national measures according to Article XX GATT.

4.2 Article XX(g) GATT (*natural resources*)

The notion of ‘exhaustible natural resources’ has been clarified by the WTO jurisprudence in the sense that it encompasses both biological resources, such as fish stocks⁹⁷ or endangered turtles,⁹⁸ as well as non-living resources, such as clean air.⁹⁹ They include living and renewable as well as non-renewable resources. It seems undisputed in legal literature that the atmosphere qualifies as a global commons.¹⁰⁰ It can therefore be argued that measures to protect the atmosphere, such as the prevention of carbon leakage, aim at conserving an ‘exhaustible natural resource’. Furthermore, even if a WTO Panel did not follow this argument, biodiversity threatened by climate change could also be invoked as a natural resource.¹⁰¹ Generally, the discussions on the degree of certainty as to whether climate change is human-induced could resurface in this context, but the reports of the IPCC (Intergovernmental Panel on Climate Change) may play a major role for the interpretation of Article XX(g) GATT.¹⁰²

4.3 Article XX(b) GATT (*health*)

Another avenue to justify potential GATT violations is the protection of human, animal, or plant life or health according to Article XX(b) GATT. However, since invoking health under Article XX(b) raises the issue of extraterritorial application

⁹⁶ WTO (1998), para. 115.

⁹⁷ GATT (1982), para. 4.9; GATT (1988a), para. 4.4; see also GATT (1991) and GATT (1994a), para. 5.13, where the parties disagreed whether dolphins could be considered natural resources in any economic sense. In both cases, the panels finally concluded that dolphins could be considered natural resources.

⁹⁸ See WTO (1998), *US–Shrimp*, para. 128, where the Appellate Body held that ‘living species, though in principle, capable of reproduction and, in that sense “renewable”, are in certain circumstances indeed susceptible of depletion, exhaustion and extinction, frequently because of human activities. Living resources are just as “finite” as petroleum, iron ore and other non-living resources’.

⁹⁹ WTO (1996), para. 6.37, where the Panel concluded ‘that a policy to reduce the depletion of clean air was a policy to conserve a natural resource within the meaning of Article XX(g)’. See also Matsushita *et al.* (2006), 797.

¹⁰⁰ Pauwelyn (2007), 35; Kommerskollegium (2009), 14.

¹⁰¹ Wiers (2008), 25.

¹⁰² Wiers (2008), 24–26.

of domestic policies and therefore requires establishing a nexus, it seems more likely that carbon tax measures will be justified with Article XX(g).¹⁰³ The fact that the sub-headings of Article XX GATT are framed differently, using ‘necessary to protect’ in Article XX(b) GATT and ‘relating to the conservation’ in Article XX(g) GATT according to WTO jurisprudence¹⁰⁴ and legal scholars¹⁰⁵ does not imply a different analytical approach. Thus, the same test applies when examining the justification of a measure under Article XX(b) or (g) GATT.

Consequently, only one case from the ample case law on Article XX(b) GATT will be discussed for the purpose of this article.¹⁰⁶

In *Brazil–Retreaded Tyres*, Brazil justified its import ban on retreaded tyres as a measure necessary to protect ‘human life and health and the environment’.¹⁰⁷ The Appellate Body held that, despite its wording, Article XX(b) GATT could be invoked for the justification of measures deployed for the protection of the ‘environment’ in general. Moreover, the Appellate Body found that the proposed alternatives, which were mostly remedial in nature (i.e. waste management and disposal), were not real alternatives to the import ban, which could prevent the accumulation of tyres. In addition, it held that ‘certain complex public health or environmental problems may be tackled only with a comprehensive policy comprising a multiplicity of interacting measures. Moreover, the results obtained from certain actions – for instance, measures adopted in order to attenuate global warming and climate change, or certain preventive actions to reduce the incidence of diseases that may manifest themselves only after a certain period of time – can only be evaluated with the benefit of time.’¹⁰⁸

4.4 *Necessity/proportionality test*

None of the Appellate Body and Panel reports has questioned the environmental or health policy choices made by governments. In fact, Article XX GATT is seen as designed to permit the consideration of important state interests. Member States therefore have a significant degree of autonomy in determining their own policies.¹⁰⁹ Their policy choices will not be subject to a necessity or proportionality test.

Instead, in order to assess their compatibility with WTO law, the Appellate Body developed a bifurcated necessity test that applies to the measure, not to the

103 Wiers (2008), 25; Hufbauer *et al.* (2009), 50.

104 WTO (1998), paras. 156–160.

105 Wiers (2008), 26; Marceau and Trachtman (2002), 830 stating that ‘even after Article XX(g) itself is satisfied, some form of a necessity test ... seems to be performed under the chapeau of Article XX’. A different opinion is represented by Davies (2009), 527, stating that ‘[t]he “necessity” requirement is more difficult to satisfy than the “relating to” requirement’.

106 WTO (1996), paras. 6.20–6.21. Other important case law includes the GATT (1991); GATT (1994a); GATT (1990b), paras. 72–73.

107 WTO (2007a), para. 7.44.

108 WTO (2007b), para. 151.

109 WTO (1996a), 28.

policy:¹¹⁰ while under some circumstances, a Member State may claim that the measure taken was the only one available to achieve its chosen level of protection, there are other situations in which a not indispensable measure is nevertheless necessary. In other words, if a measure is not indispensable, it must be proportional, i.e. there must not be a less restrictive measure ‘reasonably available’.¹¹¹ If there is indeed no alternative ‘reasonably available’, the measure is consistent with Article XX(b) or (g) GATT.¹¹²

Generally, the Appellate Body’s focus is on the relationship between the challenged measure and the attempted policy objectives.¹¹³ While a GATT Panel had stated that a measure had to be ‘primarily aimed at’ the conservation of an exhaustible natural resource under Article XX(g) GATT,¹¹⁴ the Appellate Body rejected such finding in its later rulings and undertook a different examination of the ‘relating to’ standard, particularly in the case in which the relationship between the measure at stake and the legitimate policy of conserving exhaustible natural resources is scrutinized.¹¹⁵ Of key importance is the actual contribution made by the measure to the objective pursued.¹¹⁶ A country therefore needs to demonstrate that the measure is apt to produce a material contribution to the achievement of its objective by providing for instance ‘quantitative projections in the future or qualitative reasoning based on a set of hypotheses that are tested and supported by sufficient evidence’.¹¹⁷ The values and interests at stake will determine the level of scrutiny a Panel has to apply in defining the necessity of the measures.¹¹⁸ In this regard, the protection of human life and health is considered ‘both vital and important in the highest degree’ by the Appellate Body.¹¹⁹ Accordingly, the ‘more vital or important those common interests or values are, the easier it would be to accept as “necessary” a measure designed as an enforcement instrument’.¹²⁰

The notion of ‘reasonably available alternative measures’ was further elaborated on in the *US–Gambling* case, involving the GATS. In this case, the Appellate Body found that an alternative measure which is merely theoretical in nature may not be considered as reasonably available. Such cases were interpreted as including situations where the Member is not actually capable of taking an alternative

110 WTO (2000b), para. 164.

111 Bown and Trachtman (2009), 89; see also Button (2004), 29–33 and Grosz (2011), 465–470 with further references.

112 This test was first developed in the GATT (1989), para. 5.26, referring to Art. XX(d), and then applied to Art. XX(b) by the GATT (1990b), para. 75.

113 WTO (2010), para. 243; see also Matsushita *et al.* (2006), 636–638.

114 GATT (1988b), paras. 4.6–4.7.

115 See also Wiers (2008), 25, interpreting the *US–Shrimp* case according to which a measure should contribute to attaining the environmental goal and should not be disproportionately wide in its scope and reach; it thus has to be shown that the measure applied to imports contributes to the objective.

116 WTO (2010), para. 290.

117 WTO (2010), para. 253.

118 WTO (2001b), para. 172; WTO (2000b), paras. 163 and 166.

119 WTO (2001b), para. 172.

120 WTO (2000b), para. 162.

measure or cases in which the measure would impose undue burdens on the Member, such as prohibitive costs or substantial technical difficulties.¹²¹ In *China–Audiovisual Products*, the Appellate Body confirmed its earlier decisions, especially *US–Gambling*, and clarified the burden of proof. Therefore, a country invoking Article XX GATT is not required to ‘take the initiative to demonstrate that there are no reasonably available alternatives’, but it needs to be prepared to demonstrate that alternatives suggested by the complaining party are either not reasonably available or do not serve the interests pursued.¹²²

Applying the necessity/proportionality test to carbon measures implies different steps: first, it needs to be determined whether the BTA measure on imports is indispensable to reach a Member State’s policy goals. In the light of the *Brazil–Retreaded Tyres* decision, it seems likely that a panel would accept the argument that measures aiming at reducing carbon emissions contribute to the protection of human health or the environment. However, given the controversial discussion on the efficiency of different measures, it would be difficult to prove that such a measure is indispensable to reach the policy goal. Therefore, in a second step, under the proportionality test, the public policy interest of protecting human health and the environment needs to be balanced against the interest of liberalized trade. International agreements and resolutions such as the UNFCCC, the Kyoto Protocol, the Copenhagen Accord or the Cancun Agreements underline the crucial importance of fighting climate change; consequently, establishing the proportionality of carbon-related BTA measures seems feasible.¹²³

4.5 *Chapeau of Article XX GATT*

4.5.1 *Concept of non-discrimination in Article XX GATT*

General exceptions to the GATT principles ultimately have to be in compliance with the requirements of the introductory clause or ‘chapeau’ of Article XX GATT. The chapeau refers to the application of the measures taken by a Member State and reflects the principle of good faith.¹²⁴ It reiterates non-discrimination as a ‘constitutional’ principle of WTO law. It was introduced as a reply to the concerns that the specific exceptions may be abused for protectionist motives.¹²⁵ As a result, the chapeau requires ‘marking out a line of equilibrium’¹²⁶ or weighing and balancing the different interests and rights of WTO Members.¹²⁷

121 WTO (2005), para. 308.

122 WTO (2010), para. 319.

123 Wooders *et al.* (2009), para. 129; see also Wiers (2008), 27.

124 WTO (1998), paras. 158–159.

125 Davies (2009), 508; see also WTO (1996a), para. 22; WTO (1998), para. 157.

126 WTO (1998), para. 159. See also Bown and Trachtman (2009), 132, finding that the search for ‘a line of equilibrium’ sounds suspiciously like a balancing test that could entail complex determinations and social-policy prioritizations that could be difficult to adopt by one judicial body, particularly beyond its specialized field of action.

127 WTO (1998), para. 156.

Despite consensus on the chapeau's overall objective, its precise meaning, as well as the applicable methodological approach, still seems to be somewhat under construction. So far, the Appellate Body has applied different approaches in its rulings.¹²⁸ It is therefore difficult to predict exactly which methodology would be applied by the WTO dispute settlement organs in a particular case. However, the basic principles as developed by the Appellate Body can be summarized as follows: first, the prohibition of abuse reflects that the chapeau 'serves to ensure that Members' rights to avail themselves of exceptions are exercised in good faith to protect interests considered legitimate under Article XX GATT, not as a means to circumvent one Member's obligations towards other WTO Members'.¹²⁹ Related to this notion of abuse is – second – the principle of proportionality, which, according to the Appellate Body, requires striking a balance of trade and other concerns under the chapeau.¹³⁰

The Appellate Body generally applies a two step approach: first, it needs to be considered whether the application of the measure results in discrimination between countries where the same conditions prevail. According to the Appellate Body, the word 'discrimination' in the chapeau covers both discrimination between products from different supplier countries and discrimination between domestic and imported products.¹³¹ The second step examines whether the discrimination qualifies as 'arbitrary or unjustifiable'. In a few cases, the 'disguised restriction on international trade' was examined in a third step.

Based on Article 3(2) DSU and Article 31 VCLT, WTO dispute settlement organs may further consider international environmental law.¹³² This is particularly important in the context of carbon-related measures because the principles contained in the chapeau of Article XX GATT have been incorporated into Article 3.5 UNFCCC: 'Measures taken to combat climate change, including unilateral ones, should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade.'

With regard to the comparison between different countries ('where the same conditions prevail'), the *US–Shrimp* decision is important. It criticized the US measures as requiring other WTO Members to adopt the same regulatory programme to achieve the policy goal of turtle-safe shrimp harvesting. Thereby, no differentiation was made between the different conditions applying to the different territories of the Member States. Furthermore, shrimp caught with the same methods as those employed in the US were still excluded from the US market if they were caught in waters of countries that had not been certified by the US. The

128 See also Vranes (2009), 276–282 with a critical assessment of the chapeau's requirements.

129 WTO (2007b), para. 215. A similar statement can be found in WTO (1996a), p. 22: [Measures] 'must be applied reasonably, with due regard both to the legal duties of the party claiming the exception and the legal rights of the other parties concerned'.

130 WTO (1998), paras. 152–159.

131 WTO (1996a), 22.

132 WTO (1996a), 17.

Appellate Body concluded that discrimination occurs not only when countries in which the same treaties prevail are treated differently, but also ‘when the application of the measure at issue does not allow for any inquiry into the appropriateness of the regulatory program for the conditions prevailing in those exporting countries’.¹³³ Such a finding corresponds to a relative understanding of the general rule of equality, which requires treating like cases alike, and unlike cases differently in accordance with their ‘unlikeness’.

4.5.2 ‘Arbitrary of unjustifiable’ discrimination

The chapeau test also requires an assessment as to whether the discrimination in question amounts to an ‘arbitrary or unjustifiable’ level or a ‘disguised restriction on international trade’. After a period of uncertainty, the meaning and role of this criterion was clarified in the *Brazil–Retreaded Tyres* decision. The Panel had to assess whether Brazil’s import ban which was combined with a general exception for Mercosur Members was complying with the chapeau.

The Panel interpreting ‘arbitrary’ and ‘unjustifiable’¹³⁴ assessed the extent to which the discrimination was manifesting itself in trade flows and thus the extent to which the discrimination was understood to have undermined the policy objective. Since the volumes of imports of retreaded tyres based on the Mercosur exemption were not deemed significant, the Panel did not consider the measures as an arbitrary or unjustifiable discrimination. On the contrary, in the view of the Panel the court injunctions undermined the objective of the import ban and were thus qualified as unjustifiable.¹³⁵ Given that the decisions of the Brazilian courts granting the injunctions were deemed neither capricious nor unpredictable nor irrational, the discrimination was not qualified as arbitrary.¹³⁶

On appeal by the European Communities, the Appellate Body, however, reversed the Panel’s findings and particularly rejected the applied effects-test.¹³⁷ Instead, it developed a new approach – referring to the *US–Shrimp* case¹³⁸ – by stating that ‘there is arbitrary or unjustifiable discrimination when a measure provisionally justified under a paragraph of Article XX GATT is applied in a discriminatory manner “between countries where the same conditions prevail”, and when the reasons given for this discrimination bear no rational connection to the objective falling within the purview of a paragraph of Article XX, or would go against that objective’.¹³⁹ Put differently, unjustifiable discrimination exists where there is no ‘rational connection’ between the reasons for the discrimination and

133 WTO (1998), para. 165.

134 WTO (2007a), paras. 7.257–7.259.

135 WTO (2007a), paras. 7.264–7.297.

136 Ibid., paras. 7.293–7.294.

137 WTO (2007b), paras. 229–230, 246–247. See *ibid.*, footnote 437 referring to WTO (1996b), where the Appellate Body had also rejected such an effects-based analysis.

138 WTO (1998), para. 165. On the ‘ambivalent attitude’ of the Appellate Body, see Davies (2009), 519.

139 WTO (2007b), para. 227.

the objectives reflected in the provisional justification under the paragraphs of Article XX GATT.¹⁴⁰ Consequently, the Appellate Body qualified both the Mercosur exemptions as well as the court injunctions as not having any relationship with the legitimate objective pursued by the import ban under Article XX(b) GATT, but as even going against the objective. Therefore, the Appellate Body considered them as amounting to an ‘unjustifiable and arbitrary’ discrimination under Article XX GATT.¹⁴¹ Since the discrimination’s rationale even stood in contrast to the objective of paragraph (b) of Article XX GATT, it qualified as ‘arbitrary’, despite the confirmation of the Panel’s findings that the Mercosur ruling could not be viewed as ‘capricious’ or ‘random’.¹⁴²

In the context of carbon-related BTA measures, this decision underlines the need for establishing a clear relationship between the measure at hand and the objective of the regulation. This is particularly challenging when BTA measures aim at imposing financial burdens on importers who source from countries with lenient carbon leakage regulations but have no direct impact on lowering emissions.

4.5.3 ‘Disguised restrictions on international trade’

The actual scope of ‘disguised restrictions on international trade’ has remained rather unclear. Although the wording would imply that it applies to unannounced and concealed restrictions, i.e. measures which are not formally and transparently adopted, the Appellate Body in *US–Gasoline* rejected such a finding.¹⁴³ ‘The fundamental theme is to be found in the purpose and object of avoiding abuse or illegitimate use of the exceptions to substantive rules available in Article XX.’¹⁴⁴

In further elaborating on this approach, the Panel in *EC–Asbestos* found that the term ‘restrictions’ must not be interpreted too narrowly but that the focus is on ‘disguised’ and thus on the potential abuse. It held that ‘a restriction which formally meets the requirements of Article XX(b) GATT will constitute an abuse if such compliance is in fact only a disguise to conceal the pursuit of trade-restrictive objectives’. Accordingly, ‘the protective application of a measure can most often be discerned from its design, architecture and revealing structure’. In applying this test, the Panel examined whether a *protectionist* aim was at the heart of the measure at issue¹⁴⁵ and concluded that this was not the case.¹⁴⁶ In a nutshell, the examination of a ‘disguised restriction of international trade’ can be translated into a barrier to avoid protectionist measures to be justified under Article XX GATT.

140 Davies (2009), 519. Notably, the Panel acknowledged the relevance of the cause and rationale of the discrimination when assessing whether the discrimination occurred between countries where the same conditions prevail. See *ibid.*, 515.

141 WTO (2007b), paras. 228–233, 246–247.

142 *Ibid.*, paras. 232 and 247.

143 Marceau and Trachtman (2002), 829; see also WTO (1998), para. 184.

144 WTO (1996a), para. 25.

145 WTO (2001a), paras. 8.236–8.239.

146 *Ibid.*, paras. 8.239–8.240.

In *Brazil–Retreaded Tyres*, the Panel adopted a different approach. In its interpretation of the term ‘disguised’, the Panel reiterated the Appellate Body’s finding that a restriction does not need to be formally concealed in order to be qualified as a disguised restriction within the meaning of the chapeau.¹⁴⁷ It based its examination of both the court injunctions and the Mercosur exemptions on its effects-test and thus found the court injunctions to result in the import ban being applied in a manner constituting both a means of unjustifiable discrimination and a disguised restriction to trade.¹⁴⁸ The Appellate Body, however, rejected the Panel’s effects-test and also reversed the Panel’s finding that the import ban resulted in a disguised trade restriction only to the extent that imports have taken place under the Mercosur exemption and court injunctions in volumes that significantly undermined the achievement of the import ban’s objectives. It did not tackle the question whether the measures also amounted to disguised trade restrictions.¹⁴⁹ Thus, while the Appellate Body also finally dismissed the justification of the import ban in *Brazil–Retreaded Tyres* under Article XX(b) GATT, it did so based on reasons other than those identified by the Panel.

This rather clear statement according to which a measure will not fulfill the requirements of the chapeau and will therefore not be justified under the GATT, if the discrimination that its application generates is not based on the same objective as is invoked under the individual exception, was appraised as a ‘new approach’ in legal doctrine, providing for a certain degree of clarification regarding the test applied under Article XX GATT.¹⁵⁰ However, the decision was criticized on several grounds: In the context of BTA, the argument that the Appellate Body’s approach blurs the boundaries between the different elements of Article XX GATT by applying the same assessment under both the provisional justification with regard to the ‘necessary’ requirement and the chapeau test is the most relevant.

In summary, the jurisprudence clearly confirms that Article XX GATT applies to measures linked to the production processes used in foreign countries. If a country were to justify carbon-related measures on imports under Article XX GATT, it would have to establish, first, that the import measures are reasonably related to the pursued objectives, for instance the reduction of carbon emissions or encouraging other countries to enact greenhouse gas emission controls. Since the atmosphere is shared by all countries, such objectives would fit within the scope of Article XX(g) GATT.¹⁵¹ In addition, in order to comply with Article XX(g) GATT, the measures, such as the requirement of greenhouse gas reductions, need to be applicable both to imported and domestic goods. Compliance with the chapeau of Article XX GATT very much depends on the specifics of the carbon-related

147 Ibid., para. 7.326.

148 Ibid., paras. 7.311–7.357.

149 WTO (2007b), paras. 235–239, 248–252, 258.

150 Thomas (2009), 46; see also for example the title of the contribution by Davies (2009): ‘The ‘New’ Approach in Brazil – Retreaded Tyres’.

151 Hufbauer *et al.* (2009), 83.

measures. For instance, the emission level which is being chosen as a baseline may be found to discriminate against rapidly growing countries. Furthermore, any climate policy programme needs to include some flexibility in order to accommodate the specific conditions in foreign countries.

5. Conclusions

In order to prevent carbon leakage, different measures for compensating lax environmental standards are being discussed today, with a focus on border tax adjustments (BTA). With regard to BTA, ongoing debates concentrate on two models: carbon taxes on products from countries with lower production standards and the requirement to obtain emission allowances and participate in an emission trading system (ETS). This contribution shows that carbon taxes on imports can be qualified as *indirect product taxes* within the scope of Article II GATT as long as there is a 'nexus' between the tax and the product. Such a nexus exists when carbon taxes aim at creating a level playing field between like products in the country of destination. If a carbon tax is not imposed on the good itself but on the CO₂ emissions generated in its production, the question arises whether such a tax is an *internal* or *incorporated* tax according to Article II:2(a) GATT. Examples for such taxes are charges on domestic and 'like' imported fuels or energy inputs and fossil fuels used in the production process. The majority of the legal doctrine tends to assume that energy taxes or pollution taxes would be suitable for border tax adjustment based on three elements, namely (i) energy or pollution taxes are to be qualified as *indirect* taxes; (ii) taxes applied on inputs, such as energy used during the production process, are *product taxes*; (iii) BTA is possible on a *final product* for energy and pollution taxes.

Non-compliance with the Most Favoured Nation principle does not seem to be an issue in practice. In addition, import-related measures can be framed so as to be compatible with MFN in Article I GATT by referring to the *characteristics* of the product instead of its *origin*. With regard to the criterion of National Treatment in Article III GATT, the likeness of the domestic and the imported product is of key relevance. Only '*like products*' judged upon the physical characteristics, the end-users, the competitive relationship, and the consumer preferences need to be treated equally. A particularly challenging issue in the context of determining likeness is the consideration of process and production methods (PPMs). The question is whether goods produced in a climate-friendly manner – for example according to the standards of the Kyoto Protocol – and goods produced in a carbon-intensive manner are 'like products'. At present, it remains to be seen whether Article III GATT applies to PPM-based regulatory distinctions and, if so, whether different PPMs – incorporated and not-incorporated in the final product – are sufficient to make products 'unlike'.

Article III:2 GATT prohibits the discrimination between domestic and foreign products with regard to *internal taxes* or other *internal charges*. As a result, a

carbon tax on imports would have to be accompanied by a domestic tax. In other words, a carbon tax imposed solely on imports is likely to be in violation of Article III:2 GATT. Whether the requirement to participate in an emission trading scheme falls within the scope of internal taxes in Article III:2 GATT has not been decided yet. However, there is a strong argument that an obligation to participate in an emission trading scheme could be considered an equivalent burden to an internal tax or internal charge. In addition, from a free trade perspective, such an obligation would be less restrictive than a carbon tax. As a result, imposing an obligation to participate in an ETS for both importers and domestic producers would more likely be compatible with Article III:2 GATT. Article III:4 GATT prohibits a less, favourable treatment of imported goods with regard to *laws, regulations and requirements affecting their sale, purchase, transportation, distribution, or use*. It is of particular relevance if the obligation to participate in an ETS is not considered an internal tax or charge and does not fall within the scope of Article III:2 GATT. An ETS would then have to be considered under Article III:4 GATT. From the perspective of Article III:4 GATT, the design of such a scheme is essential. It must not discriminate based on the origin of a product, but based on the level of the emissions control programme applied to it.

Since the compatibility of carbon-related BTA measures with WTO law is partly contested, potential *justifications* become relevant. *Article XX GATT* justifies a violation of the GATT based on legitimate non-trade policy goals, provided that such interests are adequately balanced against the objective of free trade. (i) A violation of the GATT can only be justified if the measure taken by a Member State fits under one of the *specific exception headings* in Article XX(a)–(j) GATT. Carbon-related measures may be qualified as measures ‘relating to the conservation of exhaustible natural resources’ in Article XX(g) GATT. In addition, the protection of human, animal, or plant health in Article XX(b) GATT may also be invoked. While it seems likely that a WTO Panel would accept Article XX(g) GATT, given the less specific jurisprudence and the need for a territorial nexus, it is less clear whether it would follow an argument based on Article XX(b) GATT. It is therefore more likely that a justification for carbon-related measures would be sought under Article XX(g) GATT. (ii) If a measure falls under one of these provisions, it still has to be *necessary* and *proportional*. It is important to note that the environmental or health policy choices made by governments have never been questioned by the Appellate Body or a Panel. Thus, a country’s policy choice is not subject to a necessity or proportionality test. Instead, the application of the policy needs to be necessary and proportional. The focus is on the *relationship* between the measure at stake and the legitimate environmental policy. A country needs to demonstrate that the measure is apt to produce a *substantial contribution* to the achievement of its objective.

Applying the necessity/proportionality test to carbon measures implies different steps: (i) It needs to be determined whether the BTA measure on imports is *indispensable* to reach a Member State’s policy goals. In other words, no other less

restrictive means must be readily available. Given the array of possible carbon-related measures, this criterion may be rather difficult to fulfil in practice. (ii) If the measure is not indispensable or its efficiency cannot be proven, the second step of the proportionality test applies: the public policy interest of protecting human health and the environment needs to be balanced against the interest of liberalized trade. The importance of protecting these interests can be underlined not only with the jurisprudence of the Appellate Body which increasingly acknowledges human health and environmental interests as justifications (*EC–Asbestos*), but also with international agreements and resolutions such as the UNFCCC, the Kyoto Protocol, the Copenhagen Accord, or the Cancun Agreements. As a result, establishing the proportionality of carbon-related BTA measures seems feasible. In addition, the measure must be applied so as not to create arbitrary or unjustified discrimination; it thus has to comply with the *Chapeau* of Article XX GATT.

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